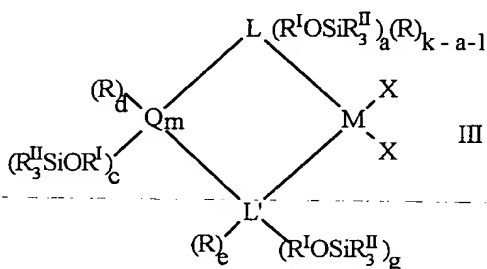
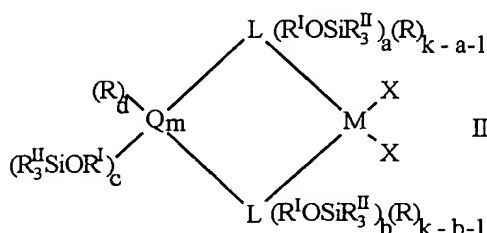


**Abstract:**

The invention relates to heterogeneous catalytic systems obtainable by reacting a porous inorganic support with an alumoxane and subsequently supporting at least one metallocene compound thereon, characterized in that the metallocene compound is defined by the following general formulas:



wherein:

- L**, equal to or different from each other, is selected from the group comprising: cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl, octahydrofluorenyl or benzoindenyl; each **R** is independently selected from hydrogen, C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>3</sub>-C<sub>20</sub> cycloalkyl, C<sub>6</sub>-C<sub>20</sub> aryl, C<sub>3</sub>-C<sub>20</sub> alkenyl, C<sub>7</sub>-C<sub>20</sub> arylalkyl, C<sub>7</sub>-C<sub>20</sub> alkylaryl, C<sub>8</sub>-C<sub>20</sub> arylalkenyl, linear or branched, optionally substituted by 1 to 10 halogen atoms, or a group SiR<sup>II</sup><sub>3</sub>; each **R<sup>I</sup>**, equal to or different from each other, is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the periodic table of the elements and boron; preferably it is: C<sub>1</sub>-C<sub>20</sub> alkylene, C<sub>3</sub>-C<sub>20</sub> cycloalkylene, C<sub>6</sub>-C<sub>20</sub> arylene, C<sub>7</sub>-C<sub>20</sub> alkenyl, C<sub>7</sub>-C<sub>20</sub> arylalkylene, or alkylarylene, linear or branched, or a group SiR<sup>II</sup><sub>2</sub>; each **R<sup>II</sup>** is independently selected from C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>3</sub>-C<sub>20</sub> cycloalkyl, C<sub>6</sub>-C<sub>20</sub> aryl, C<sub>3</sub>-C<sub>20</sub> alkenyl, C<sub>7</sub>-C<sub>20</sub> arylalkyl, C<sub>8</sub>-C<sub>20</sub> arylalkenyl or C<sub>7</sub>-C<sub>20</sub> alkylaryl, linear or branched; preferably R<sup>II</sup> is methyl, ethyl, isopropyl; each **Q** is independently selected

- from B, C, Si, Ge, Sn; **M** is a metal of group 3, 4 or 10 of the Periodic Table, Lanthanide or Actinide; preferably it is titanium, zirconium or hafnium; each **X** is independently selected from: hydrogen, chlorine, bromine,  $\text{OR}^{\text{II}}$ ,  $\text{NR}^{\text{II}}_2$ ,  $\text{C}_1\text{-C}_{20}$  alkyl or  $\text{C}_6\text{-C}_{20}$  aryl; **L'** is N or O; **z** is equal to 0, 1 or 2; **x** is equal to 1, 2 or 3; **y** is equal to 1, 2 or 3; **x + y + z** is equal to the
- 5 valence of **M**; **m** is an integer which can assume the values 1, 2, 3 or 4; **a** and **b** are integers whose value ranges from 0 to **k**-1; **f** is an integer whose value ranges from 1 to **k**; **g** is an integer whose value ranges from 0 to 1; **c** and **e** are equal to 0 or 1; **a + b + c** is at least 1; **a + g + c** is at least 1; **d** is equal to 0, 1 or 2; when **Q** is B then **c + d** = 1; when **Q** is C, Si, Ge or Sn, then **c + d** = 2; when **L'** is N, then **g + e** = 1; when **L'** is O, then **g** = 0 and **e** = 0.
- 10 The invention also relates to the polymerization process making use of the above defined catalytic